APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/938,468	08/14/1996	NICK HOLT	669005.409C3	2889

22913	7590	09/23/2004

WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER &
SEELEY)
60 EAST SOUTH TEMPLE
1000 EAGLE GATE TOWER
SALT LAKE CITY, UT 84111

EXAMINER
BASHORE, WILLIAM L

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 June 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _47-64_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _47-64_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: RCE and amendment, filed 6/10/2004, to the original application filed 8/14/1996 (Rule 60), IDS filed 4/21/1998.

2.   This application contains the following continuation history: application 08/334,616 (now Patent No. 5,557,723); application 08/207,231 filed 3/7/1994 (abandoned); and application 07/621,444 filed 11/30/1990 (abandoned). This application claims a priority filing date of **11/30/1990**.

3.   Claims 47-57 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Texier, Goodman, and Dayton.

4.   Claims 58-60 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Texier, Goodman, Dayton, and Karnik.

5.   Claims 61-64 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Texier, Goodman, and McCaskill.

6.   Claims 47-64 are pending. Claims 47, 54, 56, 57, 61 are independent claims.

Continued Examination Under 37 CFR 1.114

7.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/10/2004 has been entered.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set

forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall
> not be negatived by the manner in which the invention was made.

9.   **Claims 47-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Texier, U.S. Patent**

No. 5,119,476 issued June 1992, in view of Goodman, Danny (hereinafter Goodman), The Complete

HyperCard Handbook, September 1987, Bantam Books, Inc. pp. 56-63, 85-183, and further in view of

Dayton, Doug (hereinafter Dayton), PerForm Pro expands simple WYSIWYG form design, filling, PC

Week, Volume 7, Number 39, October 1, 1990, pp. 33-35.

        In regard to independent claim 47, Texier teaches the creation of custom forms comprising a plurality

of input fields representing form components, said fields display input data (Texier Abstract, column 1 lines

61-63, Figure 1). Texier also teaches zones which are equivalent to fields. said zones containing associated

descriptions and behaviors (Texier Figure 1 items P1-P7, column 6 lines 46-56, also column 8 lines 1-12). Texier

also teaches a set of functions which are associated with an active zone (a form input field), the filling of said

zone with data can be interpreted as a default (standard) behavior of said input field (Texier column 2 lines 8-

15) (compare the above with claim 47 *"A data processing system for displaying and receiving....the data*

processing system comprising:".

        Texier teaches a form control procedure (transaction event processor) to implement various procedures

associated with certain fields of a customized form, said procedures stored as data code (data structures) (Texier

Figure 1 items P1-P7, column 6 lines 46-56, also column 8 lines 1-12), as well as teaching generation of forms,

allowing for modifications (customizations) and usage by an author (a user), as well as said forms being

evolutionary for programmers to create forms, generating/redesigning forms accordingly (Texier column 1 lines

50-59, column 2 lines 57-61). Texier's invention is based upon program instruction descriptions (i.e. LISP,

PROLOG commands/data structures which act to preserve field placement, see Texier column 3 lines 64-68 to

column 4 lines 1-7, Figure 1, P1-P5, and menus at top of said figure). Texier does not specifically teach a data

structure having a data description of the fields (including field placement). However, Goodman teaches

HyperCard, a graphics based form designer. Goodman teaches creation of card stacks, whereby a user can

customize each card via menus for creating fields, as well as lines, boxes, etc. (Goodman p.91 – especially item

"Field Info...", also pp.130-131). Fields can be created, edited, cloned, positioned, and assigned scripts to,

accordingly (Goodman pp. 59-61, 149-151 – especially p.151 at middle, regarding "Field Info dialog box", also

p.154-155). The above teachings can be interpreted as data descriptions of form fields (within cards), preserving

spatial placement. It would have been obvious to one of ordinary skill in the art at the time of the invention to

apply Goodman to the data structures and menus of Texier, providing Texier a more user friendly graphical

method of creating and editing forms (compare the above with claim 47 "*means for storing a form data

structure for each of....the behavior of the form indicates operations associated with the form;* ").

Texier teaches a GUI based input form system connected to a database of information, said database

used to fill in forms with data according to each field's particular attribute (i.e. NAME, etc.) (Texier Figure 1, at

top, also column 11 lines 1-4, column 16 lines 15-20). Texier's Figure 1 GUI form can also be fairly interpreted

as a "user input data structure". The "SEE/MODIFY EMPLOYEE" query option (Figure 1 near top left) is used

to query said database (previously populated by a user), therefore said GUI option can be interpreted as a "pack

attribute" (which is part of the form), causing the retrieved query result data to be packed into said user input

structure for final access display. Said query option is associated with all relevant attributes of the fields

(compare with claim 47 "*means for packing the user input into the user-input data structure....for displaying the

user input.*").

Texier teaches forms being evolutionary for programmers to create forms, generating/redesigning forms

accordingly (Texier column 1 lines 50-59, column 2 lines 57-61). Since Texier's form procedures are associated

with a form display (i.e. Texier Figure 1), the selection of said form indicates the selection of said assigned

procedures as well. Texier also teaches receiving input from a user (Texier Figure 1) (compare with claim 47

"means for selecting one of the plurality of forms; means for retrieving the form data structure for the selected form; means for receiving input from a user of the computer system;").

Texier teaches a form control procedure for executing a selected custom behavior subsequent to user input (validation) (Texier Figure 1 item P7, also Figure 3; compare with claim 47 *"means for, in response to receiving the user input, invoking....performs a custom behavior for the fields of the form,"*).

Texier does not specifically teach providing a plurality of user defined operations associated with form fields. However, Dayton teaches PerForm Pro, a form creation tool comprising Form Designer for constructing forms using objects on a menu driven work area, and a toolbox to customize forms. (Dayton p.33 Summary, at 1, also p.34 at 2 and 3; compare with claim 47 *"the custom behavior indicating user-defined operations associated with the fields of the form"*). It is noted that Dayton's toolbox provides various user selectable options (tools) to customize a form. It is also noted that each tool in said toolbox has default features that can be modified (defined) to help customize said form, including creating text, graphics fields, and boxes, said tools helping to create forms associated with input data (Dayton p.33 Summary, at 1, also p. 34 at 2, 3, 4, and 5). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Dayton to Texier, because of Dayton's taught advantage of selectable defined form design options, providing a user of Texier the advantage of visually choosing selections to customize Texier's input form (including data entry portions) from a toolbox set of design options.

Texier teaches zones which are equivalent to input fields, said zones containing associated descriptions and behaviors. as well as a form control procedure to implement a procedure associated with certain fields, a common and known behavior (a standard behavior) for a form field is the capability of accepting entered user data (Texier Figure 1, items P1-P7, Figure 3, column 6 lines 46-56, also column 8 lines 1-12). It is noted that Texier teaches various input fields subject to validation, the standard operation of data input is performed as long as validation is not performed (compare with claim 47 *"means for performing the standard behavior for the fields of the form when custom behavior is not performed;"*).

In regard to dependent claim 48, Texier teaches a form containing a plurality of input fields said input fields can be assigned to various procedures (i.e. validation, font, etc.). Since Texier's form procedures are associated with a form display (i.e. Texier Figure 1), the selection of said form indicates the selection of said assigned procedures (form control procedures) as well. (Texier Figure 1, 3).

In regard to dependent claim 49, Texier teaches an "EXIT" button, which can be interpreted as an additional standard behavior (clearing, or saving data input) (Texier Figure 1 item P6). The input data can be exited before it is validated via Texier Figure 1 item P7.

In regard to dependent claims 50, 51, Texier teaches a form with an active field triggering a validation event subsequent to user input of data into said field. The EXIT operation is suppressed (as well as altering input data) once validation commences (Texier Figure 1, column 2 lines 8-15).

In regard to dependent claim 52, Texier teaches a user invoking a VALIDATION request after a standard operation (i.e. accepting user data input) is accepted into memory (Texier Figure 1).

In regard to dependent claim 53, Texier teaches validation (a form control procedure) of the fields on a form (Texier Figure 1). Texier teaches Validation of inputted user data in each field. When all fields are full, the system prevents any more input (standard input operation ceases).

In regard to independent claim 54, claim 54 reflects the computer readable methods comprising computer readable instructions used for implementing the system as claimed in claim 47, and in further view of the following, is rejected along the same rationale.

The limitation of overriding standard behavior would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Texier, because Texier teaches validation of user input (a custom behavior) (Texier Figure 1). Typically, once validation commences, the system no longer accepts changes to the

submitted input (the standard operation of accepting/changing data is overridden), until validation ends, providing the benefit of preventing changes while validating a portion of data (compare with claim 54 *"so the form control procedure can override the standard behavior of the field"*).

In regard to dependent claim 55, Texier teaches a form containing a plurality of input fields said input fields can be assigned to various procedures (i.e. validation, font, etc.). Since Texier's form procedures are associated with a form display (i.e. Texier Figure 1), the selection of said form indicates the selection of said assigned procedures (form control procedures) as well. (Texier Figure 1, 3).

In regard to independent claim 56, claim 56 incorporates substantially similar subject matter as claimed in claim 54, and in further view of the following, is rejected along the same rationale.

Texier's invention relates to a searchable employee database (Texier column 6 lines 20-22). Texier does not specifically disclose performing a custom behavior prior to "performing" a standard behavior. However, since it is well known and typical that employee databases can incorporate incomplete partial data regarding some employees (i.e. new employees pending negotiated salaries, and/or assigned branches, the corresponding fields are generally left blank to be filled in later). It would have been obvious to one of ordinary skill in the art at the time of the invention (in view of the above) to allow Texier's database to handle partial data and blank fields, therefore running validation checks (a custom behavior) (Figure 1 item P7) on a blank field before performing user input on said field (a standard behavior). Applying this teaching provides Texier the benefit of a highly adaptable database (compare with claim 56 *"prior to performing the standard behavior to the field to which the user input is directed..."*).

In regard to independent claim 57, claim 57 incorporates substantially similar subject matter as claimed in claim 54 and 56, and is rejected along the same rationale.

10.   **Claims 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Texier, Goodman, and Dayton, as applied to claim 57 above, and further in view of Karnik, U.S. Patent No. 5,404,294 issued April 1995.**

In regard to dependent claims 58, 59, 60, Texier teaches the creation of a form header (Texier column 3 lines 42-43). Texier does not specifically teach a primary key. However, Karnik teaches a primary key (Karnik column 5 lines 53-57; compare with claim 58 "*a primary key*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Karnik to Texier, because of Karnik's taught advantage of primary keys, providing a way to link the forms of Texier to a database.

Texier teaches the creation of form flags, and form coordinates specifying the appearance, position, and size of a window (Texier column 4 lines 16-23; compare with claim 58 "*form flags*", and "*form coordinates for specifying the position and size of the window*").

Texier teaches a character string for use as a form title (Texier Figure 1 item EMPLYOEE INFORMATION, also column 4 line 23; compare with claim 3 "*a character string for use as a form title*").

Texier does not specifically teach primary/secondary keys, or a unique identifier for a field. However, Karnik teaches a tag with a unique set of properties, and can act as a key to an attached set of properties (Karnik column 2 lines 50-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Karnik to Texier, because of Karnik's taught advantage of keys, providing a way to link the forms of Texier to a database.

Texier teaches the creation of a field type and field attributes (Texier column 6 lines 46-56).

Texier teaches field placement (Texier Figure 1 item P1-P7). It is known in the art that a location of an object on a computer screen is referenced by position coordinates.

Texier teaches font characteristics (Texier Figure 1 items P1-P7, also Figure 2; compare with claim 4 "*font characteristics of the field*").

The storage of computer code (i.e. a diskette, hard drive, or computer RAM memory) for implementing computer programs, is known in the art, therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention to use such storage, providing the benefit of future use.

11.   **Claims 61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Texier, in view of Goodman, and further in view of McCaskill et al. (hereinafter McCaskill), U.S. Patent No. 5,121,499 issued June 1992.**

In regard to independent claim 61, Texier teaches the creation of custom forms comprising a plurality of input fields representing form components, said fields display input data (Texier Abstract, column 1 lines 61-63, Figure 1). Texier also teaches zones which are equivalent to fields. said zones containing associated descriptions and behaviors (Texier Figure 1 items Pl-P7, column 6 lines 46-56, also column 8 lines 1-12). Texier also teaches a set of functions which are associated with an active zone (a form input field), the filling of said zone with data can be interpreted as a default (standard) behavior of said input field (Texier column 2 lines 8-15) (compare the above with claim 61 "*A method in a data processing system....comprising the steps of:*".

Texier teaches a form control procedure (transaction event processor) to implement various procedures associated with certain fields of a customized form, said procedures stored as data code and comprising descriptions (Texier Figure 1 items Pl-P7, column 6 lines 46-56, also column 8 lines 1-12), as well as teaching generation of forms, allowing for modifications (customizations) and usage by an author (a user), as well as said forms being evolutionary for programmers to create forms, generating/redesigning forms accordingly (Texier column 1 lines 50-59, column 2 lines 57-61). Texier's invention is based upon program instruction descriptions (i.e. LISP, PROLOG commands/data structures which act to preserve field placement, as well as provide an operational menu (see Texier column 3 lines 64-68 to column 4 lines 1-7, Figure 1, P1-P5, and menus at top of said figure). Texier does not specifically teach a data description of the fields (including field placement). However, Goodman teaches HyperCard, a graphics based form designer. Goodman teaches creation of card stacks, whereby a user can customize each card via menus for creating fields, as well as lines, boxes, etc.

(Goodman p.91 – especially item "Field Info...", also pp.130-131). Fields can be created, edited, cloned,

positioned, and assigned scripts to, accordingly (Goodman pp. 59-61, 149-151 – especially p.151 at middle,

regarding "Field Info dialog box", also p.154-155). The above teachings can be interpreted as data descriptions

of form fields (within cards), preserving spatial placement. It would have been obvious to one of ordinary skill

in the art at the time of the invention to apply Goodman to the data structures and menus of Texier, providing

Texier a more user friendly graphical method of creating and editing forms (compare the above with claim 61

"retrieving a data description....at the data processing system").

Texier teaches forms being evolutionary for programmers to create forms, generating/redesigning forms

accordingly (Texier column 1 lines 50-59, column 2 lines 57-61). Since Texier's form procedures are associated

with a form display (i.e. Texier Figure 1), the selection of said form indicates the selection of said assigned

procedures as well. Texier also teaches receiving input from a user (Texier Figure 1) (compare with claim 61

"displaying the custom....under the control of the form control procedure,").

Texier's invention relates to a searchable employee database (Texier column 6 lines 20-22). Texier does

not specifically disclose performing a custom behavior prior to "performing" a standard behavior. However,

since it is well known and typical that employee databases can incorporate incomplete partial data regarding

some employees (i.e. new employees pending negotiated salaries, and/or assigned branches, the corresponding

fields are generally left blank to be filled in later). It would have been obvious to one of ordinary skill in the art

at the time of the invention (in view of the above) to allow Texier's database to handle partial data and blank

fields, therefore running validation checks (a custom behavior) (Figure 1 item P7) on a blank field before

performing user input on said field (a standard behavior). Applying this teaching provides Texier the benefit of a

highly adaptable database (compare with claim 61 *"prior to performing the standard behavior to the field to*

which the user input is directed...").

Texier teaches a form control procedure for executing a selected custom behavior subsequent to user

input (validation) (Texier Figure 1 item P7, also Figure 3; compare with claim 61 *"performing a custom*

behavior for the field to which the data is directed....").

Texier does not specifically teach said custom behavior including modifying the display of a field other then the field to which data is directed. However McCaskill teaches a spreadsheet (a type of customizable input form), which incorporates a custom "next cell" feature. McCaskill Figure 2, item 5, shows display highlighting of a cell to which data is directed. A next cell position can be determined by a user at Figure 3 via drop down menu, resulting in highlighting of a designated next active cell when triggered (Figure 4, item 10) (see also McCaskill column 2 lines 32-37, column 3 lines 27-29, 34-51, 62-67, column 4 lines 44-47) (compare with claim 61 "... *the custom behavior including modifying the display of a field other than the field to which the data is directed*"). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply McCaskill to Texier, providing Texier the benefit of directing users along a clear path of input steps.

Texier teaches zones which are equivalent to input fields, said zones containing associated descriptions and behaviors. as well as a form control procedure to implement a procedure associated with certain fields, a common and known behavior (a standard behavior) for a form field is the capability of accepting entered user data (Texier Figure 1, items P1-P7, Figure 3, column 6 lines 46-56, also column 8 lines 1-12). It is noted that Texier teaches various input fields subject to validation, the standard operation of data input is performed as long as validation is not performed (compare with claim 61 "*returning an indication....the data is directed*", and "*when the returned indication....the data is directed.*").

In regard to dependent claims 62-64, Texier teaches a validation button, to which a user can validate displayed input field data a plurality of times (re-invoking a control procedure) (Texier Figure 1).

The use of data structures for holding computer program data for present and/or future use is known in the art.

Response to Arguments

12.   Applicant's arguments filed 6/10/2004 have been fully and carefully considered but they are not

persuasive.

Applicant's arguments on pages 14-16 are substantially directed to the amended limitation regarding

"prior to performing the standard behavior of the field to which the user input is directed," (i.e. perform the

custom behavior prior to performing the standard behavior). It is the examiner's opinion that the key element in

this particular amendment is "performing", which is different than "overriding the standard behavior" as

claimed for example, in claim 54 (i.e. the standard behavior is made available (user input), but not necessarily

performed). The examiner addresses this amendment in the rejection of claim 56.
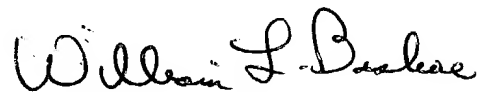
Conclusion

13.   Any inquiry concerning this communication or earlier communications from the examiner should be

directed to William L. Bashore whose telephone number is (703) 308-5807. The examiner can normally be

reached on 11:30am - 8:00pm EST. During the month of October 2004, the examiner's telephone number will

transition to **(571) 272-4088.**

14.   If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild

can be reached on (703) 305-9792. The fax phone number for the organization where this application or

proceeding is assigned is 703-872-9306. During the month of October 2004, the supervisor's telephone number

will transition to **(571) 272-4090.**

15.   Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free).

William L. Bashore
Patent Examiner AU 2176
September 19, 2004